K022649

Special 510 (k) Device Modification COOK-Swartz Doppler Flow Probe and Monitor System 9 of 9

## K. 510 (K) SUMMARY

### Submitted By:

Thomas J. Kardos Vice President, Regulatory Affairs Cook Vascular Incorporated P.O. Box 529 Leechburg, PA 15656 (724) 845-8621 August 6, 2002

Device:

Trade Name: COOK-Swartz Doppler Flow Probe

Common/Usual Name: Blood Flow Sensor or

Probe, Doppler Catheter

Proposed Classification Name: Diagnostic Ultrasonic Transducer

probe, 21 CFR Part 892.1580 (90-ITX)

#### **Predicate Devices:**

The Modified COOK-Swartz Doppler Flow Probe is substantially equivalent to the currently marketed COOK-Swartz Doppler Flow Probe D.C. #K964001, with respect to intended use, material composition, and method of operation.

#### **Device Description:**

The Modified COOK-Swartz Doppler Flow Probe is intended for monitoring blood flow through vessels in patients intraoperatively and during reconstructive vascular procedures. The COOK-Swartz Doppler Flow Probe is supplied sterile, and non-pyrogenic and is intended for one-time use. Reasonable assurance of biocompatibility of the body fluid/tissue contacting materials comprising the device is provided by their established history of use in medical product manufacturing.

#### Substantial Equivalence:

The device will be manufactured according to specified process controls and a Quality Assurance Program, undergoing packaging and sterilization procedures similar to the currently marketed and distributed COOK-Swartz Doppler Flow Probe D.C. #K964001 by Cook Vascular Incorporated. This device is similar with respect to indications for use, materials and physical construction to predicate devices in terms of section 510 (k) substantial equivalency.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

## SEP 6 2002

Mr. Thomas J. Kardos Vice President, Regulatory Affaris Cook Vascular Incorporated P.O. Box 529, Route 66 River Road LEECHBURG PA 15656-0529

Re: K022649

Trade Name: Cook-Swartz Doppler Flow Probe

Regulation Number: 21 CFR 892.1570

Regulation Name: Diagnostic ultrasonic transducer

Regulatory Class: II Product Code: 90 ITX Dated: August 6, 2002 Received: August 9, 2002

#### Dear Mr. Kardos:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the Cook-Swartz Flow Probe and Monitoring System, as described in your premarket notification:

#### Transducer Model Number

#### COOK-Swartz Doppler Flow Probe

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>. Please be advised that FDA's issuance of a substantial equivalence determination does not mean

that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801, please contact the Office of Compliance at (301) 594-4591. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597 or at its Internet address "http://www.fda.gov/cdrh/dsmamain.html".

If you have any questions regarding the content of this letter, please contact Rodrigo C. Perez at (301) 594-1212.

Sincerely yours,

for Nancy C. Brogdon

Director, Division of Reproductive, Abdominal and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure(s)

Device Name: Cook-Swartz Doppler Flow Probe

# Diagnostic Ultrasound Indications for Use Form

# Fill out one form for each ultrasound system and each transducer.

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation									
	A	В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)
Ophthalmic										
Fetal										
Abdominal				ļ						
Intraoperative (specify)				Р						
Intraoperative Neurological				ļ						
Pediatric	ļ <u>.</u>			ļ		!				
Small Organ (specify)										
Neonatal Cephalic	ļ									
Adult Cephalic			ļ							
Cardiac				ļ						
Transesophageal	ļ			-						
Transrectal	<u> </u>									
Transvaginal	ļ			ļ						
Transurethral		-								
Intravascular										
Peripheral Vascular	ļ			<u> </u>						
Laparoscopic	ļ		ļ							
Musculo-skeletal Conventional		-								
Musculo-skeletal Superficial	ļ									
Other (specify) N= new indication; P=	<u></u>			P						<u> </u>

14- new indication, i providedly closed by 1214 2 added affact inportant 2
Additional Comments: The Cook-Swartz Doppler Flow Probe is intended for use
with the Swartz Doppler Monitoring System for monitoring blood flow in
vessels intraoperatively, and following reconstructive micro-vascular
procedures, re-implantation, and free-flap transfers. The Cook-Swartz
Doppler Flow Probe is supplied sterile and is intended for one-time use.
(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

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510(k) Number ..

Device Name: Cook Vascular Blood Flow Monitor (D.C. #K964001)

#### Diagnostic Ultrasound Indications for Use Form

#### Fill out one form for each ultrasound system and each transducer.

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

	Mode of Operation									
Clinical Application	Α	В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)
Ophthalmic		_	,	ļ						
Fetal	ļ			ļ						
Abdominal					ļ					
Intraoperative (specify)				Р	<u> </u>		_			
Intraoperative Neurological				P						
Pediatric	ļ			<u> </u>						
Small Organ (specify)				<u> </u>						
Neonatal Cephalic	ļ		ļ	<u> </u>						
Adult Cephalic	ļ									
Cardiac	ļ			ļ					:	
Transesophageal		<u> </u>	ļ	<u> </u>					1	
Transrectal				ļ	ļ					
Transvaginal				ļ	ļ					
Transurethral	<u> </u>		<u> </u>		ļ					
Intravascular	<u> </u>		ļ	ļ	ļ					
Peripheral Vascular								<b></b>		
Laparoscopic	ļ	ļ		ļ						
Musculo-skeletal Conventional										
Musculo-skeletal Superficial			<u> </u>	<u> </u>	ļ					
Other (specify)				P	<u> </u>					

N= new indication; P= previously cleared by FDA; E= added under Appendix E
Additional Comments: The Cook Vascular Blood Flow Monitor is used with the
Cook-Swartz Doppler Flow Probe (D.C. #K964001) and the Cook Vascular
Shapeable Doppler Flow Probe (D.C. #K002958) to monitor blood flow intra-
operatively, during intraoperative neuro-vascular procedures, and following
reconstructive micro-vascular procedures, re-implantation and free flap transfer

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Reproductive, Abdominal,

and Radiological Devices

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510(k) Number (if known): 15022649

Device Name: COOK- Swartz Doppler Flow Probe

Indications For Use:

The COOK- Swartz Doppler Flow Probe and Monitor System is intended for monitoring blood flow in vessels intraoperatively, and following reconstructive micro-vascular procedures, re-implantation, and free flap transfers. The COOK-Swartz Doppler Flow Probe is supplied sterile and intended for one time use

(PLEASE DO NOT WRITE BELOW THIS LINE- CONTINUE ON ANOTHER PAGE IF NEEDED Concurrence of CDRH, Office of Device Evaluation (ODE)

(Division Sign-Off)

Division of Reproductive, Abdominal,

and Radiological Devices

510(k) Number \_\_\_

Perscription Use\_\_\_\_\_\_(Per 21 CFR 801.109)

OR

Over-The-Counter Use\_\_\_\_